

In the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Claims 1-54 (previously canceled)

55. (Currently Amended) A method for ex-vivo treatment of ~~platelets~~ a platelet-containing fraction, wherein said platelet-containing fraction includes at least one of PRP and PC fractions, comprising

treating platelets with carbon monoxide, wherein said treating comprises placing the platelets in an atmosphere containing at least about 40% carbon monoxide for at least 10 minutes; and

wherein said treating step optionally further comprises adding a pH buffering substance to said platelet-containing fraction.

56. (Canceled)

57. (Previously presented) The method of claim 55, wherein said atmosphere comprises carbon monoxide at a concentration in the range of about 40% to about 100%.

58. (Currently amended) The method of claim 55, further comprising the step of storing said treated ~~platelets~~ platelet-containing fraction at a suitable temperature, wherein viability of the stored, treated ~~platelets~~ platelet-containing fraction is retained.

59. (Currently amended) The method of claim 55, further comprising, after said treating step and before administration to a subject, the step of promoting atmospheric exchange of air for carbon monoxide in said treated ~~platelets~~ platelet-containing fraction.

60. (Currently amended) The method of claim 59, wherein said promoting step is performed by exposing said treated ~~platelets~~ platelet-containing fraction to air for a sufficient time to allow gas exchange to occur.

61. (Currently amended) The method of claim 59, ~~wherein said air comprises oxygen~~ wherein said promoting step is performed by exposing said treated platelet-containing fraction to oxygen for a sufficient time to allow gas exchange to occur.

62. (Canceled)

63. (Currently amended) The method of ~~claim 62~~ claim 55, wherein said pH buffering substance comprises at least 30mM bicarbonate.

64. (Canceled)

65. (Currently amended) A method for inhibiting pathogen growth in a platelet-containing fraction, wherein said platelet-containing fraction includes at least one of PRP and PC fractions, comprising treating the platelet-containing fraction with carbon monoxide, wherein said treating comprises placing the platelet-containing fraction in an atmosphere containing at least about 40% carbon monoxide for at least 10 minutes for a sufficient amount of time to inhibit pathogen growth; and wherein said treating step optionally further comprises adding a pH buffering substance to said platelet-containing fraction.

66. (Canceled)

67. (Canceled)

68. (Currently amended) The method of ~~claim 67~~ claim 65, wherein said atmosphere comprises carbon monoxide at a concentration in the range of about 40% to about 100%.

69. (Previously presented) The method of claim 65, further comprising the step of storing said treated platelet-containing fraction at a suitable temperature to preserve viability of the platelets.

70. (Currently amended) The method of claim 65, further comprising, after said treating step and before administration to a subject, the step of promoting atmospheric exchange of air for carbon monoxide in said treated platelet-containing fraction.

71. (Previously presented) The method of claim 70, wherein said promoting step is performed by exposing said treated platelet-containing fraction to air for a sufficient time to allow gas exchange to occur.

72. (Currently amended) The method of claim 70, ~~wherein said air comprises oxygen-~~ wherein said promoting step is performed by exposing said treated platelet-containing fraction to oxygen for a sufficient time to allow gas exchange to occur.

73. (Canceled)

74. (Currently amended) The method of ~~claim 73~~ claim 65, wherein said pH buffering substance comprises at least 30mM bicarbonate.